

AMENDMENTS TO THE CLAIMS

1. (currently amended) An input device for processing and assembling a scan of a biometric image of a fingertip, said input device comprising:

a housing;

a scan head mounted to the housing;

a platen moveably mounted to the housing for movement relative to the housing and the scan head by the fingertip between a first position and a second position, wherein the scan head captures scan lines depending on the time of capture as the platen is moved from the first position to the second position;

an encoder target associated with the platen, said encoder target comprising a non-repeating set of patterns, wherein the scan head is configured to capture a scan line of the biometric image of the fingertip and a pattern of the encoder target in a single scan line capture;

a biasing device configured to bias the platen into its first position; and

an end of scan switch configured to be actuated when the platen is in the second position, wherein the actuation of the end of scan switch is configured to provide tactile feedback to the fingertip

wherein the input device processes and assembles the scan of the biometric image from a plurality of scan lines captured by the scan head by ordering each of the ~~plurality of captured~~ scan lines as a function of the encoder target pattern included in each captured scan line, and

wherein the input device does not include a particular captured scan line in the processed and assembled scan if the particular captured scan line has ~~[[a]] an encoder target pattern matching [[a]] an encoder target pattern of a captured scan line previously included in the processed and assembled scan.~~

2 (canceled).

3 (canceled).

4. (previously presented) The device of claim 1, wherein the scan head is adapted to capture scan lines as the platen is moved.
- 5 (canceled).
6. (original) The device of claim 1, wherein the housing is configured to provide a support surface and the platen moves parallel to the support surface.
7. (original) The device of claim 1, wherein the biasing device is an extension spring.
8. (original) The device of claim 1, wherein the platen comprises an external surface configured to provide a contact surface for the biometric image.
9. (currently amended) The device of claim 1, wherein a pattern on the encoder target is used for calibrating a series of captured scan lines to form an image representative of the biometric image.
10. (original) The device of claim 1, wherein movement of the platen away from the first position activates the scan head.
11. (original) The device of claim 1, wherein the platen comprises a transparent window.
12. (original) The device of claim 1, wherein the platen is translationally moveable relative to the housing.
13. (previously presented) The device of claim 1, wherein the biometric image comprises a fingerprint of the fingertip.
14. (currently amended) The device of claim 3, wherein the platen comprises a transparent window, an upper surface and lower surface, the upper surface configured to provide a contact area for the biometric image, wherein the housing is configured to

provide a support surface and the platen moves parallel to the support surface, wherein the scan head is ~~adaptive~~ adapted to capture scan lines as the platen is moved, wherein the biasing device comprises a coiled spring, and wherein ~~the~~ a non-repeating set of patterns of the encoder target is used for calibrating a series of captured scan lines to form an image representative of the biometric image, the biometric image comprising a fingerprint.

15. (currently amended) An input device for processing and assembling a scan of a biometric image of a fingertip, said input device comprising:

a housing;

a platen moveably mounted to the housing for movement relative to the housing by the fingertip between a first position and a second position;

an end of scan switch configured to be actuated when the platen is in the second position, wherein the actuation of the end of scan switch is configured to provide tactile feedback to the fingertip

an encoder target associated with the platen, said encoder target comprising a non-repeating set of patterns;

a scan head, the scan head being configured to scan a pattern of the encoder target and to capture a scan line of the biometric image of the fingertip together with a pattern of the encoder target, wherein the scan head captures scan lines depending on the time of capture as the platen is moved from the first position to the second position, and wherein the input device processes and assembles the scan of the biometric image from a plurality of scan lines captured by the scan head by ordering each of the plurality of captured scan lines as a function of the encoder target pattern included in each captured scan line and wherein the input device does not include a particular captured scan line in the processed and assembled scan if the particular captured scan line has [[a]] an encoder target pattern matching [[a]] an encoder target pattern of a captured scan line previously included in the processed and assembled scan; and

a start of scan sensor having a first state and a second state, wherein movement of the platen away from the first position changes the state of the start of scan sensor and

wherein the input device emits an audible tone in response to changing the state of the start of scan sensor.

16. (previously presented) The device of claim 15, wherein the housing is configured to provide a support surface and the platen moves parallel to the support surface.

17. (original) The device of claim 15, further comprising a biasing device.

18. (previously presented) The device of claim 15, wherein the platen comprises a transparent window.

19 (canceled).

20. (canceled).

21. (currently amended) A method of processing and assembling a scan of a biometric image of a fingertip with an input device having a platen and a housing, said method comprising:

sensing movement of the platen relative to the housing wherein the step of sensing movement of the platen activates a scan head mounted to the housing, said scan head capturing scan lines depending on the time of capture as the platen is moved from a first position to a second position, wherein said platen includes an encoder target having a non-repeating set of patterns and wherein each scan line captured by the scan head includes a scan line of the biometric image of the fingertip together with a pattern of the encoder target, and wherein the fingertip provides movement of the platen relative to the housing;

monitoring scan lines captured by the scan head until a predetermined encoder target pattern is detected in a scan line captured by the scan head;

in response to the detection of the predetermined encoder target pattern, processing and assembling a plurality of captured scan lines of the biometric image of the fingertip,

wherein processing and assembling further comprises ordering each of the plurality of captured scan lines as a function of the encoder target pattern included in each captured scan line, and

wherein processing and assembling further comprises not including a particular captured scan line in the processed and assembled scan if the particular captured scan line has a encoder target pattern matching a encoder target pattern of a captured scan line previously included in the scan; and

providing tactile feedback to the fingertip providing movement to the platen when the platen is in the second position, in response to actuation of an end of scan switch of the input device by the platen.

22. (original) The method of claim 21, further comprising the step of translating the platen.

23. (original) The method of claim 21, wherein the movement is a horizontal direction.

24. (original) The method of claim 21, wherein the movement is a vertical direction.

25. (previously presented) The method of claim 21, wherein capturing said scan lines is accomplished by a single sensor array.

26. (previously presented) The method of claim 21, wherein the biometric image of the fingertip is a single fingerprint image.

27. (currently amended) The method of claim 21, further wherein processing and assembling the plurality of captured scan lines comprises using the pattern of the encoder target of each captured scan line to combine the plurality of captured scan lines to form an image representative of the biometric image of the fingertip.

28. (canceled).

29. (original) The method of claim 21, further comprising the step sensing that the scan is complete with an end of scan switch.

30. (currently amended) The method of claim 21, wherein the scan head is a single sensor, said method further comprising:

translating the platen; and

sensing that the scan is complete with an end of scan switch; and

wherein processing and assembling the plurality of captured scan lines comprises using the pattern of the encoder target of each captured scan line to combine the plurality of captured scan lines to form an image representative of the biometric image of the fingertip.

31. (previously presented) The device of claim 1 wherein the device determines that the platen is in the second position and actuates the end of scan switch when a predetermined pattern of the encoder target is captured by the scan head.